

## WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:
  - an image sensing element which is formed on a semiconductor substrate on which at least one of a semiconductor layer, a color filter layer, and a microlens layer is formed by a plurality of divisional exposure operations; and
  - a correction device which corrects variations in a signal output from said image sensing element between a plurality of partial image sensing regions formed by the plurality of divisional exposure operations.
2. The apparatus according to claim 1, wherein said correction device divides the partial image sensing region into a plurality of blocks, and performs correction using a different correction value for each block.
3. The apparatus according to claim 1, wherein the plurality of partial image sensing regions include at least three partial image sensing regions in one direction, and said correction device corrects remaining two image sensing regions with correction values by using as a reference a central partial image sensing region among the three partial image sensing regions.
- 25 4. The apparatus according to claim 1, wherein said correction device performs correction using different correction values in a boundary direction between the

partial image sensing regions, and the same correction value in a direction perpendicular to the boundary direction.

5. The apparatus according to claim 1, wherein said  
5 correction device performs correction using a different  
correction value for each color.

6. An image sensing apparatus comprising:  
an image sensing element on which color filters  
of a plurality of colors for sensing an object image  
10 are formed; and

a correction device which divides an image  
sensing region of said image sensing element into a  
plurality of partial image sensing regions, and  
corrects variations between the partial image sensing  
15 regions by using a different correction value for each  
color.

7. The apparatus according to claim 6, wherein said  
image sensing element outputs a signal from a different  
output unit for each partial image sensing region, and  
20 said correction device performs correction using a  
different correction value for each output unit.

8. The apparatus according to claim 6, wherein  
correction is performed using a different correction  
value for each lens.

25 9. The apparatus according to claim 6, wherein  
correction is performed using a different correction  
value for each exit pupil position of an optical

system.

10. The apparatus according to claim 6, wherein  
correction is performed using a different correction  
value for each F-number.